Please amend claims 1, 4, and 10-16, and add new claims 17-21, as follows.

1. (Currently Amended) A receiving method in a receiver of a radio system, comprising:

receiving a signal with an array antenna comprising at least two antenna elements,

oversampling the received signal,

measuring the spatial and temporal color of the received oversampled signal,

combining the received signal using combined maximum ~~ration~~ ratio combining and space-time interference rejection combining,

controlling the combining of the received signal on the basis of the measurement results.

2. (Original) The method of claim 1, further comprising:

calculating the energy of interference;

calculating the cross-correlation of noise between samples of the received signals,

calculating a threshold value as a quotient of the above values,

controlling the combining on the basis of the threshold value.

3. (Original) The method of claim 2, further comprising:

calculating at least one scaling factor as a function of the threshold value, and controlling the combining on the basis of the scaling factor.

4. (Currently Amended) The method of claim 3, further comprising:

calculating the scaling factor according to formula e^{β}, where <u>e is</u> <u>an exponential</u> <u>function and</u> β is the threshold value.

5. (Original) The method of claim 3, further comprising:

calculating the scaling factor according to formula $A\beta$, where β is the threshold value and A is a predetermined constant.

6. (Original) The method of claim 1, further comprising:

calculating a noise covariance matrix comprising noise variance terms, temporal covariance terms and spatial covariance terms, and

scaling the spatial covariance terms on the basis of the measurement result.

7. (Previously Presented) The method of claim 3, further comprising:

scaling the spatial covariance terms using the scaling factor.

8. (Original) The method of claim 3, further comprising:

comparing the calculated threshold value with a pre-determined value, and if

the threshold value exceeds the given pre-determined value, the combining of the

received signal is controlled on the basis of the scaling factor.

9. (Original) The method of claim 3, further comprising:

calculating a scaling factor for each antenna element pair separately.

10. (Currently Amended) A receiver, comprising ~~an array antenna for signal~~

~~reception, the array antenna comprising at least two antenna elements, the receiver~~

~~further comprising~~:

an antenna array means comprising at least two antenna elements, for receiving at

least one signal;

an oversampling means for oversampling the received signal;~~;~~

a measuring means for measuring the spatial and temporal color of the samples;

a combining means for combining the received signal using combined maximum

ratio combining and space-time interference rejection combining;~~;~~ and

a controlling means for controlling the combining of the received signal based on

~~the basis of~~ the measurement result.

11. (Currently Amended) The receiver of claim 10, further comprising:

a first calculating means for calculating the energy of noise;

a second calculating means for calculating the cross-correlation of noise between samples of the received signals,

a third calculating means for calculating a threshold value as a quotient of the above values,

wherein the controlling means is further configured ~~means~~ for controlling the combining based on ~~the basis of~~ the threshold value.

12. (Currently Amended) The receiver of claim 11, ~~further comprising~~

wherein the controlling means is further configured for calculating at least one scaling factor as a function of the threshold value, and controlling the combining based on ~~the basis of~~ the scaling factor.

13. (Currently Amended) The receiver of claim 10, further comprising

wherein the controlling means ~~for calculating~~ is further configured for calculating the scaling factor according to formula e^{β}, where e is and error vector and β is the threshold value.

14. (Currently Amended) The receiver of claim 12, further comprising

a fourth calculating means for calculating a noise covariance matrix comprising noise variance terms, temporal covariance terms and spatial covariance terms, and

a scaling means for scaling the spatial covariance terms using the scaling factor.

15. (Currently Amended) The receiver of claim 12, further comprising

a comparing means for comparing the calculated threshold value with a pre-determined value, and making the decision of the use of the scaling factor on the basis of the comparison.

16. (Currently Amended) ~~The~~ A receiver comprising:

an antenna array ~~antenna~~ for signal reception, the array antenna comprising at least two antenna elements,;

an analog to digital converter ~~for oversampling~~ configured to oversample the received signal;

a ~~calculator~~ measuring unit ~~for measuring~~ configured to measure the spatial and temporal color of the samples

a ~~calculator~~ combining unit configured to ~~for combining~~ combine the received signal using combined maximum ratio combining and space-time interference rejection combining, and

a ~~calculator~~ control unit ~~for controlling~~ configured to control the combining of the received signal based on ~~the basis of~~ the measurement result.

17. (New) The receiver of claim 16, further comprising:

a first calculator unit configured to calculate the energy of noise;

a second calculator unit configured to calculate the cross-correlation of noise

between samples of the received signals,

a third calculator unit configured to calculate a threshold value as a quotient of the

above values,

wherein the combining unit is further configured to control the combining based

on the threshold value.

18. (New) The receiver of claim 17, wherein the combining unit is further

configured to calculate at least one scaling factor as a function of the threshold value, and

to control the combining based on the scaling factor.

19. (New) The receiver of claim 16, wherein the combining unit is further

configured to calculate the scaling factor according to formula e^{β}, where e is an error

vector and β is the threshold value.

20. (New) The receiver of claim 18, further comprising:

a noise covariance matrix comprising noise variance terms, temporal covariance

terms and spatial covariance terms; and

a scaling unit configured to scale the spatial covariance terms using the scaling factor.

21. (New) The receiver of claim 18, further comprising:

a comparing unit configured to compare the calculated threshold value with a pre-determined value, and to make the decision of the use of the scaling factor based on the comparison.